REMARKS

In response to the above-identified Office Action, Applicant amends the application seeks reconsideration thereof. In this response, Applicant amends Claims 1, 4, 8 and 11. Applicant does not cancel or add any new claims. Accordingly, Claims 1-25 are pending.

I.   Claim Objections

The Examiner objects to claims 4-5 and 11-12 because in claims 4 and 11 the words "a timestamp" seem to refer back to "a timestamp" recited in claims 1 and 8, respectively. Applicant amends Claims 1, 4, 8 and 11 to clarify the claims. Applicant respectfully requests approval of the amendment and withdrawal of the objection of Claims 4-5 and 11-12.

II.   Drawings

The Examiner objects to the drawings indicating that Figure 1 should be designated by a legend such as "Prior Art" because only that which is old is illustrated. Applicant respectfully traverses the objection.

Applicant respectfully submits that Figure 1 does not only illustrate that which is old since Figure 1 represents a broad view of one embodiment of the present invention. The subsequent figures show narrower views of the embodiment illustrated in Figure 1 as evidenced by the consistent use of the reference numbers of Figure 1 labeling the same features throughout the subsequent figures.

Applicants respectfully submit that Figures 2-4 illustrate that which is not old since these figures show at least one embodiment of Applicants' device. Since Figure 1 is a broader view of Figures 2-4, Figure 1 cannot illustrate only that which is old. Therefore, since Figure 1 does not illustrate only that which is old, Figure 1 does not illustrate prior art and should not be labeled as "Prior Art." Accordingly, Applicant respectfully requests withdrawal of the objection of the drawings.

III. Claims Rejected Under 35 U.S.C. §102

The Examiner rejects claims 1, 4-8, 11-15, 18-21 and 23 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,032,261 issued to Hulyalkar ("Hulyalkar"). Applicant respectfully traverses the rejection.

To anticipate a claim, the relied upon reference must disclose every limitation of the claim. *Scripps Clinic & Research Found v. Genentech*, 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). Among other elements, independent claim 1 includes receiving a second signal defining a transport time domain asynchronous to a reference time domain and generating an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain.

In making the rejection, the Examiner relies on Hulyalkar to show these elements. (Col. 4, line 40 to Col. 5, line 39). Hulyalkar teaches a bus bridge for interconnecting a plurality of buses. Hulyalkar, Abstract. The cited text describes that the goal of Hulyalkar is to synchronize the cycle counters within all nodes connected to a local IEEE 1394 serial bus. Hulyalkar, Col. 4, lines 46-51. To accomplish this goal, Hulyalkar, teaches that a cycle_start packet (consisting of a packet header and bus_time portions transmitted by the root node) is prepared and sent to each node, the cycle counter within each node being set to the appropriate bus_time according to the received cycle_start packet. Hulyalkar, Col. 4 line 58 to Col. 5, line 3. The bus_time value is loaded into a register of the receiver node. Hulyalkar, Col. 5, lines 10-11. An appropriate processing delay, caused by either the time for performing a decoding operation or the time taken to load the bus, is determined and the delay is then added to the output, from which the outputs of each node can be synchronized. Hulyalkar, Col. 5, lines 12-18. Hulyalkar then states, "...all of the bridge portals in an IEEE 1394 serial bus bridge must be synchronized to a common cycle clock in order for the bridge to support isochronous routing of real-time data" and minimize "the timing jitter resulting from the use of different wired or wireless switching fabrics" Hulyalkar, Col. 5, lines 30-33 and lines 35-37.

Applicant respectfully submits Hulyalkar teaches only one clock signal, a root node signal. The root node signal is given a value and is then assigned a bus_time corresponding to a delay

incurred in gaining access to the bus. However, the bus_time is not a second, asynchronous clock cycle, it is merely the root node signal with a delay. Therefore, any timestamp generated will only be with respect to the root node clock signal and represented as a measure of the root node clock signal, which cannot be asynchronous since all of the bridge portals must be synchronized to a common cycle clock. Thus, Hulyalkar does not teach all of the elements of claim 1 since Hulyalkar does not teach at least a timestamp indicating a point in time with respect to the reference time domain and represented as a measure of the transport time domain, which is asynchronous to the reference time domain. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 1.

Claims 4-7 depend from claim 1 and are not anticipated at least for the same reasons as claim 1. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 4-7.

Claim 8 defines an article of manufacture causing a processor to generate an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain similar to claim 1. Therefore, the discussion above regarding Hulyalkar's failure to teach at least these elements of claim 1 is equally applicable here. Thus, claim 8 is not anticipated by Hulyalkar. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 8.

Claims 11-14 depend from claim 8 and are not anticipated at least for the same reasons as claim 8. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 11-14.

Claim 15 defines an apparatus comprising means for generating an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain similar to claims 1 and 8. Therefore, the discussion above regarding Hulyalkar's failure to teach at least these elements of claims 1 and 8 is equally applicable here. Thus, claim 15 is not anticipated by Hulyalkar. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 15.

Claims 18-20 depend from claim 15 and are not anticipated at least for the same reasons as claim 15. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 18-20.

Claim 21 defines a system comprising a network interface to generate an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain similar to claims 1, 8 and 15. Therefore, the discussion above regarding Hulyalkar's failure to teach at least this element of claims 1, 8 and 15 is equally applicable here. Thus, claim 21 is not anticipated by Hulyalkar. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 21.

Claim 23 depends from claim 21 and is not anticipated at least for the same reasons as claim 21. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 23.

IV.   Claims Rejected Under 35 U.S.C. §103

The Examiner rejects claims 2-3, 9-10, 16-17 and 11-25 under 35 U.S.C. 103(a) as being obvious over Hulyalkar in view of U.S. Patent No. 6,064,677 issued to Kappler et al. ("Kappler"). Applicant respectfully traverses this rejection.

To render a claim obvious, the relied upon references must teach or suggest every limitation of the claim such that the invention as a whole would have been obvious at the time the invention was made to one skilled in the art. Claims 2-3 depend from independent claim 1. The discussion above with respect to Hulyalkar's failure to teach or suggest generating an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain as recited by claim 1 is equally applicable here.

In addition, the Examiner does not cite Kappler for teaching or suggesting generating an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain. The Examiner cites Kappler for teaching that it is known to provide approximations to ordering of packets by timestamps whereby the timestamps represent the virtual finishing time or equivalently the virtual starting time for the packet which are computed by taking a starting time value and adding an offset obtained by multiplying the length of the packet by a weight which represents the particular packet sequence's share of the bandwidth. Paper No. 4, pages 6-7.

In reviewing Kappler, Applicant has been unable to discern any section of Kappler that teaches or suggests generating an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain. Kappler teaches multiple rate sensitive priority queues for reducing relative data transport unit delay variations in time multiplexed outputs from output queued routing mechanisms. Kappler, Col. 7, lines 60-63. A data path of a switch is synchronously clocked at a pre-determined rate. Kappler, Col. 8, lines 52-54. The phase of the clock is delayed by differing amounts at different points along the data path to give the data adequate time to settle prior to being transferred from one stage to the next. Kappler, Col. 8, lines 54-59.

Applicant respectfully submits that, similar to Hulyalkar discussed above, Kappler teaches only one clock cycle, which includes delays and that a delay is not the equivalent of a signal asynchronous to the reference time domain. In addition, to combine Hulyalkar and Kappler as the Examiner suggests, "there must be some suggestion or motivation, either in the references themselves of in the knowledge generally available to one skilled in the art, to modify the reference or to combine reference teachings." MPEP § 2143. The Examiner has not cited anywhere in Hulyalkar or Kappler where the Examiner believes there is a suggestion or motivation to combine these references. Likewise, the Examiner has not indicated what, if any, knowledge generally available to one skilled in the art provides a suggestion or motivation to combine Hulyalkar and Kappler. Therefore, the Examiner has not met the Examiner's initial burden of factually supporting a *prima facie* conclusion of obviousness. See MPEP § 2142.

In addition, claims 2-3 include the elements of dynamically sampling a first and a second signal to determine a scale factor and an offset factor between a reference and transport time domains, which are asynchronous to each other. The Examiner admits that Hulyalkar fails to teach or suggest these elements. Applicant's discussion above regarding Hulyalkar's failure to teach or suggest more than one clock cycle is equally applicable here since Hulyalkar cannot sample a first and a second signal, asynchronous to each other, when Hulyalkar only teaches one signal.

The Examiner relies on <u>Kappler</u> to cure the defects of <u>Hulyalkar</u>. The Examiner characterizes <u>Kappler</u> as teaching ordering packets "by timestamps whereby the timestamps represent the virtual finishing <u>time</u> or equivalently the virtual starting <u>time</u> for the packet which are computed by taking a starting <u>time</u> value and adding an <u>offset</u> obtained by multiplying the length of the packet by a weight which represents the particular packet sequence's share of the bandwidth...." <u>Paper No. 4</u>, pages 6-7 (citing <u>Kappler</u>, Col. 4, line 65 – Col. 5, line 14). Applicant has reviewed the cited sections of <u>Kappler</u> and respectfully disagrees with the Examiner's characterization of <u>Kappler</u>.

<u>Kappler</u> teaches, "in both self-clocked weighted fair queuing and virtual clock, packets are ordered (sorted) by timestamps (schemes such as round-robin provide approximations to ordering of packets by timestamps)." <u>Kappler</u>, Col. 5, lines 5-8. Further, these timestamps represent the virtual starting/finishing time for the packet and are computed by "taking the starting time value and adding an offset obtained by multiplying the length of the packet by weight which represents the particular packet sequence's share of the bandwidth." <u>Kappler</u>, Col. 5, lines 9-14. "In other words, an ATM queuing point which implements <u>either</u> virtual clock or self-clocked weighted fair queuing performs the following steps:

(1) compute the maximum of (a) the current virtual time for the VC, and (b) either of i) the arrival time of the cell or ii) the system virtual time.

(2) add to the results of step 1 above a per-VC constant representing the VC's share of the bandwidth.

(3) service cells (transmit them) in order of increasing values of the virtual time stamps assigned by steps 1 and 2." <u>Kappler</u>, Col. 5, lines 48-85.

Therefore, <u>Kappler</u> teaches a device implementing <u>either</u> virtual clock or self-clocked weighted fair queuing, not both of these implemented together and asynchronous to each other. Moreover, <u>Kappler</u> does not teach or suggest determining a scale factor and an offset factor between a reference and transport time domains since <u>Kappler</u> merely teaches the offset is used to order the

cells (high or low priority) for transmission with respect to a single signal, and fails to teach or suggest any scale factor between a reference and transport time domain.

Thus, Kappler fails to cure the defects of Hulyalkar. Therefore, the failure of Kappler to cure the defects of Hulyalkar is fatal to the rejection and claims 2-3 are not obvious over Hulyalkar in view of Kappler. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 2-3.

Claims 9-10 depend from independent claim 8. The discussion above with respect to Hulyalkar's failure to teach or suggest generating an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain is equally applicable here. In addition, the discussion above with respect to the Examiner's failure to cite Kappler and Applicant's inability to discern a teaching or suggestion of at least these elements is equally applicable. Also equally applicable is the Examiner's failure show where, either in the references or in the knowledge generally available to one skilled in the art, the Examiner believes the motivation or suggestion to combine Hulyalkar and Kappler exists.

In addition, claims 9-10 include the elements of dynamically sampling a first and a second signal to determine a scale factor and an offset factor between a reference and transport time domains, which are asynchronous to each other similar to claims 2-3. Therefore, the discussion above regarding the combination of Hulyalkar and Kappler failing to teach or suggest at least these elements is equally applicable here.

Thus, Kappler fails to cure the defects of Hulyalkar. Therefore, claims 9-10 are not obvious over Hulyalkar in view of Kappler. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 9-10.

Claims 16-17 depend from independent claim 15. Therefore, the discussion above with respect to Hulyalkar's failure to teach or suggest generating an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain is equally applicable here. In addition,

the discussion above with the Examiner's failure to cite <u>Kappler</u> and Applicant's inability to discern a teaching or suggestion of at least these elements is equally applicable. Also equally applicable is the Examiner's failure show where, either in the references or in the knowledge generally available to one skilled in the art, the Examiner believes the motivation or suggestion to combine <u>Hulyalkar</u> and <u>Kappler</u> exists.

In addition, claims 16-17 include the elements of dynamically sampling a first and a second signal to determine a scale factor and an offset factor between a reference and transport time domains, which are asynchronous to each other similar to claims 2-3. Therefore, the discussion above regarding the combination of <u>Hulyalkar</u> and <u>Kappler</u> failing to teach or suggest at least these elements is equally applicable here.

Therefore, <u>Kappler</u> fails to cure the defects of <u>Hulyalkar</u>. Thus, claims 16-17 are not obvious over <u>Hulyalkar</u> in view of <u>Kappler</u>. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 16-17.

Claims 22-25 depend from independent claim 21. Therefore, the discussion above with respect to <u>Hulyalkar</u>'s failure to teach or suggest generating an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain is equally applicable here. In addition, the discussion above with the Examiner's failure to cite <u>Kappler</u> and Applicant's inability to discern a teaching or suggestion of at least these elements is equally applicable. Also equally applicable is the Examiner's failure show where, either in the references or in the knowledge generally available to one skilled in the art, the Examiner believes the motivation or suggestion to combine <u>Hulyalkar</u> and <u>Kappler</u> exists.

In addition, claims 22-25 include the elements of dynamically sampling a first and a second signal to determine a scale factor and an offset factor between a reference and transport time domains, which are asynchronous to each other similar to claims 2-3. Therefore, the discussion above regarding the combination of <u>Hulyalkar</u> and <u>Kappler</u> failing to teach or suggest at least these elements is equally applicable here.

Thus, <u>Kappler</u> fails to cure the defects of <u>Hulyalkar</u>. Therefore, claims 22-25 are not obvious over <u>Hulyalkar</u> in view of <u>Kappler</u>. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 22-25.

The Examiner rejects claims 11-15 and 18-21 without specifically discussing the reasons for rejection. Applicant presumes that the obviousness rejection was directed toward claims 22-25 instead of 11-25 as written. In the event Applicant has made an incorrect presumption, the discussion above with respect to claims 11-15 and 18-21 is equally applicable to an obviousness rejection. Moreover, Applicant respectfully submits <u>Kappler</u> does not remedy the defects of <u>Hulyalkar</u> discussed above since <u>Kappler</u> fails to teach or suggest generating an isochronous network packet including a timestamp indicating a point in time measured with respect to the reference time domain and represented as a measure of the transport time domain. Accordingly, Applicant respectfully requests withdrawal of the obviousness rejection of claims 11-15 and 18-21.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending are now in condition for allowance and such action is earnestly solicited at the earliest possible date. If there are any additional fees due in connection with the filing of this response, please charge those fees to our Deposit Account No. 02-2666. Questions regarding this matter should be directed to the undersigned at (310) 207-3800.

Respectfully submitted,

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